Advanced php:-----

* **Step 1: Database Schema (MySQL):**

CREATE DATABASE product\_management;

USE product\_management;

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

email VARCHAR(100) UNIQUE,

password VARCHAR(255),

role ENUM('manager', 'customer') NOT NULL

);

CREATE TABLE products (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

description TEXT,

price DECIMAL(10,2),

stock INT

);

CREATE TABLE orders (

id INT AUTO\_INCREMENT PRIMARY KEY,

customer\_id INT,

product\_id INT,

quantity INT,

total\_price DECIMAL(10,2),

FOREIGN KEY (customer\_id) REFERENCES users(id),

FOREIGN KEY (product\_id) REFERENCES products(id)

);

* **Step 2: Database Connection (config/database.php):**

<?php

class Database {

private $host = "localhost";

private $db\_name = "product\_management";

private $username = "root";

private $password = "";

public $conn;

public function connect() {

$this->conn = null;

try {

$this->conn = new PDO("mysql:host=" . $this->host . ";dbname=" . $this->db\_name, $this->username, $this->password);

$this->conn->setAttribute(PDO::ATTR\_ERRMODE, PDO::ERRMODE\_EXCEPTION);

} catch (PDOException $e) {

echo "Connection failed: " . $e->getMessage();

}

return $this->conn;

}

}

?>

* **Step 3: User Model (app/models/User.php):**

<?php

require\_once 'config/database.php';

class User {

private $conn;

private $table = "users";

public function \_\_construct() {

$database = new Database();

$this->conn = $database->connect();

}

public function register($name, $email, $password, $role) {

$hashedPassword = password\_hash($password, PASSWORD\_DEFAULT);

$stmt = $this->conn->prepare("INSERT INTO " . $this->table . " (name, email, password, role) VALUES (?, ?, ?, ?)");

return $stmt->execute([$name, $email, $hashedPassword, $role]);

}

public function login($email, $password) {

$stmt = $this->conn->prepare("SELECT \* FROM " . $this->table . " WHERE email = ?");

$stmt->execute([$email]);

$user = $stmt->fetch(PDO::FETCH\_ASSOC);

if ($user && password\_verify($password, $user['password'])) {

return $user;

}

return false;

}

}

?>

* **Step 4: Product Model (app/models/Product.php):**

<?php

require\_once 'config/database.php';

class Product {

private $conn;

private $table = "products";

public function \_\_construct() {

$database = new Database();

$this->conn = $database->connect();

}

public function addProduct($name, $description, $price, $stock) {

$stmt = $this->conn->prepare("INSERT INTO " . $this->table . " (name, description, price, stock) VALUES (?, ?, ?, ?)");

return $stmt->execute([$name, $description, $price, $stock]);

}

public function getAllProducts() {

$stmt = $this->conn->prepare("SELECT \* FROM " . $this->table);

$stmt->execute();

return $stmt->fetchAll(PDO::FETCH\_ASSOC);

}

}

?>

* **Step 5: Product Controller (app/controllers/ProductController.php)**

<?php

require\_once 'app/models/Product.php';

class ProductController {

private $product;

public function \_\_construct() {

$this->product = new Product();

}

public function addProduct($name, $description, $price, $stock) {

if ($this->product->addProduct($name, $description, $price, $stock)) {

echo "✅ Product added successfully!";

} else {

echo "❌ Failed to add product.";

}

}

public function viewProducts() {

return $this->product->getAllProducts();

}

}

?>

* **Step 6: Routes (routes.php):**

<?php

require\_once 'app/controllers/ProductController.php';

$productController = new ProductController();

if ($\_SERVER['REQUEST\_METHOD'] === 'POST' && isset($\_POST['add\_product'])) {

$productController->addProduct($\_POST['name'], $\_POST['description'], $\_POST['price'], $\_POST['stock']);

}

?>

* **Step 7: Frontend Forms (views/manage\_products.php):**

<!DOCTYPE html>

<html lang="en">

<head>

<title>Manage Products</title>

<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css">

</head>

<body>

<div class="container mt-4">

<h2>Manage Products</h2>

<form method="POST" action="../routes.php">

<input type="hidden" name="add\_product">

<div class="mb-3">

<label>Product Name:</label>

<input type="text" name="name" required class="form-control">

</div>

<div class="mb-3">

<label>Description:</label>

<input type="text" name="description" required class="form-control">

</div>

<div class="mb-3">

<label>Price:</label>

<input type="number" name="price" required class="form-control">

</div>

<div class="mb-3">

<label>Stock:</label>

<input type="number" name="stock" required class="form-control">

</div>

<button type="submit" class="btn btn-primary">Add Product</button>

</form>

</div>

</body>

</html>